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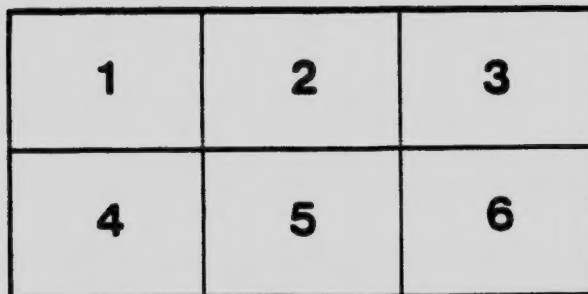
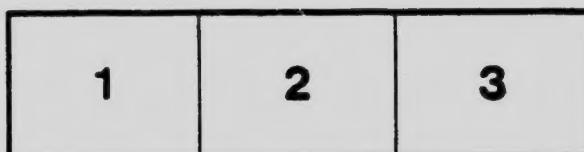
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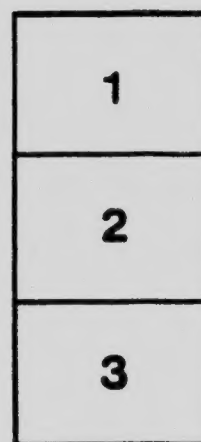
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Great Waterways Union of Canada

Organized at Berlin, Ont., the 11th day of January, 1912

The Inland Waterways of Canada.

Ocean Navigation via St. Lawrence and
Welland Route.

Georgian Bay Canal Route Impracticable

Containing also a treatise on the subject by

D. B. Detweiler, Berlin, Ontario

PUBLISHED BY ORDER OF THE UNION.



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Organization Proceedings

of the

Great Waterways Union of Canada

The organization meeting of the Great Waterways Union of Canada was held at Berlin, Ont., on the 11th day of January, 1912.

The following representatives were present:—J. B. Fischer, Mayor of Waterloo; Elias Lemon, Mayor of Owen Sound; F. Stewart Scott, Mayor of Galt; C. M. R. Graham, Mayor of London; L. Hahn, President of the New Hamburg Board of Trade; George A. Dobbie, President of the Galt Board of Trade; George C. H. Lang, Berlin; S. J. Cherry, Preston; George J. Thorp, Mayor of Guelph, and Aldermen R. H. Brydon, Jos. Larson, H. Mahoney, and Howard, Guelph; Alexander Stewart, President of the Guelph Board of Trade; J. W. Lyon, President of the Guelph Junction & Guelph Radial Railways; James Schafenburg, Thorold; J. E. Hancock, Secretary of the Galt Board of Trade; A. M. Edwards, Vice-President of the Galt Board of Trade; Ald. Jos. Stauffer, Galt; W. G. Weichel, M. P., Waterloo; George Pattinson, M. P. P., Preston; W. B. Burgoyne, President of the St. Catharines Board of Trade; Mayor W. H. Schmalz, Reeve W. D. Euler, Ald. Jos. Winterhalt, Ald. Wm Pieper, Ald. N. B. Detweiler, Ald. Geo. Bucher, Ald. C. H. Mills, D. B. Detweiler; President J. A. Scellen of the Board of Trade, Messrs. W. E. Butler, Geo. Rumpel, S. A. Brubacher, C. Schweitzer, O. Kinzie, H. J. Bowman, C. E., G. M. DeBus, A. J. Roos, Dr. R. W. Schnarr, W. M. Cram, J. F. McKay, H. L. Janzen, J. A. Lang, Dr. J. F. Honsberger, H. J. Sims, A. E. Seibert, Hy. Knell, J. G. Wing, C. K. Hagedorn, A. Weseloh, C. A. Ahrens, S. E. Moyer, Dr. H. M. Bowman, A. Foster, sr., C. E. Moyer, and others of Berlin; J. B. Hughes, Ald. A. C. Moyer and A. Bauer, of Waterloo; Ald. E. B. Fewings, Galt; Ald. J. U. Pequegnat, Guelph; Ald. J. S. Schwartz, Berlin; B. H. Zeigler, J. T. Uttley, W. Strub, A. J. Kimmel, A. A. Eby, J. J. A. Weir, P. M., Ald. Hagen, J. E. Klotz, E. Smyth, Jaffray Eaton, Berlin, and others.

The meeting was called to order by Mayor Schmalz of Berlin, who gave an address of welcome, and spoke highly of Mr. D. B. Detweiler, who was largely the organizer of the movement. He stated that Mr. Detweiler had been the original mover also of the hydro-electric power scheme

some ten years ago, and that he followed up that campaign until it was an accomplished fact.

On motion of Mr. Detweiler, seconded by Mr. Fennell, Mayor Thorp of Guelph, was elected Chairman of the meeting.

Mayor Thorp spoke in part as follows:—

"I must thank His Worship Mayor Schmalz and Mr. Detweiler, the chairman of the committee, for their kindness in extending to myself and our aldermen and our Board of Trade, the invitation to attend this meeting. I am pleased to report that my own City of Guelph is represented by four Aldermen, by Mr. Alexander Stewart, the President of the Guelph Board of Trade, and by Mr. J. W. Lyon, the President of the Guelph Junction Railway.

"I wish also to say that I had the pleasure of reading the pamphlet issued by Mr. Detweiler, and I think it is a move in the right direction, and I approve of every word of the same. This is not a provincial question, it is a national question. The whole of the Dominion is interested in this project. If we are going to build up our great Northwest and bring the products of that country to the seaboard, we must improve our waterways. The question at the present time is whether it would be best to bring it through the Georgian Bay, Lake Nipissing, and Ottawa River route, or by the Great Lakes and the Welland Canal. The almost unanimous opinion at the meeting of the Associated Boards of Trade held in Toronto last spring was that ~~the~~ Great Lakes and Welland Canal was much the better route."

Mr. Detweiler was then called upon to read the whole of his pamphlet, which is attached to this report, and which it is believed is the most important statement of the case that has been made to the Canadian people, and it is hoped that it will be widely read and understood.

Mr. Detweiler stated verbally:

"I thank you for your attendance here to-day. I feel much gratified at the interest you are taking in this movement. I do not know that an apology is necessary for calling a meeting at Berlin, an inland town, instead of at one of our neighboring lakeports. We considered that the holding of a meeting here would emphasize the fact that the question is one of great importance to all sections of the country.

"When we took up the matter of Niagara power in 1902, ten years ago, some thought we were painting rainbows, but I think we were justified in the move then made, and I consider this will be of very much greater benefit, as it affects the whole Dominion."

Mr. Detweiler then read his pamphlet, which was listened to with much interest.

At this point Mr. J. W. Lyon of Guelph moved, and Mayor Graham of London seconded, the following important resolution:—

That in the opinion of this meeting the question of transportation is the most important, material and economic question, before the people of Canada. This feature is emphasized by the geographical position of Canada, also by British connection, and by the trade policy adopted.

Although nature has been kind to Canada, and has furnished natural

channels through which trade should flow, namely the Great Lakes, the St. Lawrence River, and connecting links, and although this natural channel of transportation has been of great service in the past, modern conditions are such, and time is so urgent, that it is of the utmost importance that the Dominion Government proceed to enlarge the Welland Canal upon lines sufficiently large to accommodate ocean tonnage and to proceed with as little delay as possible with other improvements with the ultimate object of having an ocean waterway through the great lakes to Port Arthur.

Further that this meeting protests against the apparent attempt to stampede the people in favor of the so-called Georgian Bay Canal, which, in the opinion of eminent engineers and experts, is not practical, and is in fact a waste of money and a waste of time, as well as involving a tremendous expenditure for totally inadequate results. The Government report showing the number of curves necessary, amounting to 116, of which are one mile in radius and 39 of which are one-half mile or less in radius, means that it would be actually dangerous to navigation as well as being slow and carrying a prohibitive rate of insurance, with say 80 miles of slack water navigation, and with one month less navigation season. According to the Government report, in addition to numerous dams for storage purposes, the whole system depends on forty-five other dams for regulation purposes; any one of which by reason of obstruction or accident would necessarily tie up the whole system, and according to the same report the water is not and cannot be available in sufficient quantity at the height of land for use in the canal, except by pumping from Lake Nipissing into the summit reach for locking purposes; which statement, unless proved incorrect by further surveys and expert reports, would make it criminal on the part of the Dominion Government to embark on such an enterprise.

That something should be done of a practical nature is emphasized by the fact that the Erie Barge Canal from Buffalo to New York is fast approaching completion and will be ready for actual business within three or four years from date, increasing the size of the barges from 250 tons to 1,000 tons, and lessening the cost of transportation of grain by two to three cents per bushel, enabling them to capture the main part of the business, and put out of commission a large portion of the inland marine of the Dominion of Canada.

We submit instead that with an improved Welland Canal, pending the completion of the ocean route to Port Arthur and Fort William, Canada would retain her carrying trade and secure in a great measure that of the adjoining republic. That water transportation of grain, merchandise, etc., from the Great West would be reduced in cost from one-half to two-thirds, increasing the value of every acre of land in the Canadian Northwest. That portions of this work can be accomplished in time to prevent the loss of business by reason of the Erie Barge Canal, and that the work as a whole is the natural supplement of the hundreds of millions of dollars expended in the past for the general systems of railways running from East to West.

That, further, the water powers which would be developed as a necessary adjunct to this enterprise on the St. Lawrence River are estimated at from three to five million horse power, worth on an actual rental basis from three to five dollars per horse power annually, and locat-

ed where all available power is in demand, with revenue sufficient to defray interest and a large portion of the sinking fund upon the whole contemplated development.

In conclusion, we would ask for the fullest and most complete investigation in the least possible space of time, with a view to the speedy accomplishment of this great national policy, and we protest against any expenditure, except for necessary investigation, for the construction of the Georgian Bay Canal, with the crude information now at hand.

This resolution is supplementary to and in addition to the resolution passed by the Canadian Society of Civil Engineers at their meeting held at Montreal on the 16th of March last after a full discussion on the question by that Society.

And further, that a copy of this resolution be sent to the Premier of the Dominion of Canada, and to the Minister of Railways and Canals.

Passed unanimously by a standing vote.

Mr. Lyon spoke at some length in support of the resolution, in part as follows:

"Now, a word first as to what water transportation means. At the present time, and for years past, a merchant in Spokane buying goods in New York or Boston, has to pay as freight rate the full rail freight rate from New York to Seattle and the local freight rate from Seattle back to Spokane. A merchant in Salt Lake City has to pay, on freight coming from New York, the full rail freight rate from New York to San Francisco and the local freight rate from San Francisco back to Salt Lake City; Seattle and San Francisco having this advantage by being seaports and having water transportation, an advantage which will be still further increased when the Panama Canal is completed. This illustration will show you the immense advantage of being able to take ocean steamships, without unloading, direct to Port Arthur and Fort William through Nature's waterway, and put the railways in competition with this water route.

The State of New York twelve years ago commenced rebuilding the Erie Barge Canal at a cost of over one hundred million dollars. That is not being done by the United States, but by the State of New York alone. This barge canal will be completed in approximately three years from date with 12 ft. of water as against 7 in the old canal, increasing the carrying capacity of the barges from 250 tons to ~~350~~ tons. The completion of this barge canal will have a tremendous effect upon the question of transportation.

The only checkmate possible is the immediate improvement of the Welland Canal, which may be accomplished within three or four years from date, and which would again turn the advantage in favor of Canada.

It would be useless to discuss the Georgian Bay Canal as a check to the Erie Barge Canal, because the promoters themselves state that it would take from eight to twelve years to build, and the cost may be anywhere from one to three hundred million dollars. And it would be a terrible calamity for our merchant marine to lose their business, and the St. Lawrence to go almost unused for years and years; which must be the natural result of the completion of the Erie Barge Canal without the improvement of the Welland Canal.

To preserve our national system of navigation East and West we are

up against an emergency. Business judgment dictates that the Government should lose no time in the proper improvement of the Welland Canal, that the improvement should be in the shape of an ocean steamship canal, regardless of any reasonable cost. This would admit the largest boats, drawing 22 feet, that can now run from the head of the Lakes to Buffalo, but which cannot get through the 14 feet of water now available in the Welland Canal, and would allow these boats to run to Kingston or Prescott. This would retain more than the advantage of transportation that Canada now enjoys, notwithstanding the competition of the Erie Barge Canal, and it is apparently the only possible way that Canada can be protected.

The further working out of a sufficient channel for ocean navigation to the head of the Great Lakes can be proceeded with as fast as may be advisable, either by Canada alone, or jointly with the United States, as it would be of immense advantage to a large portion of the United States to have such an immense reduction in the cost of exporting its products as this ocean waterway would secure.

The plan for the Georgian Bay Canal is too crude for the expenditure of money. It is stated without contradiction that there are a great number of miles of slack water navigation, that slack water freezes much sooner and opens later than running water, that the season of transportation would be one month or more shorter. These 117 curves shown by the government's own report, of which 77 are of one mile radius and 39 of a half-mile radius, are considered by practical vessel men as dangerous, slow to operate, and that the cost of insurance would be actually prohibitory, that it would be criminal on the part of the Dominion Government to embark upon such an enterprise with the information now at hand. The government maps show that the Georgian Bay Canal first locks the boats 100 feet up, and then hundreds of feet down. It is only necessary to look at the maps to feel that the plan is impossible.

We have done big things in Canada in spite of the prophecy that the C. P. R. would be only a streak of rust across the prairies. See the value of C. P. R. stock to-day! There are great things in store for Canada, and we are going to accomplish great results. We are making history to-day, and I hope to see a national waterway with ocean vessels sailing from Liverpool to Port Arthur and Fort William by the way which Nature has mapped out.

Mayor Graham of London, in seconding the resolution, said:

"As I get to understand the question better, especially as to the number of curves that would be necessary to work the Georgian Bay Canal scheme, it appears to me that it is now up to the people of Ontario to take steps to stop the building of that canal.

"The citizens of London spent half a million dollars sixty years ago to get a harbor at Port Stanley, and built the railway which has since been leased. The lease will soon expire. It is then expected it will be taken up by the city and operated with Niagara power. In the recent campaign the slogan was, 'London on Lake Erie.' But now that this new scheme is proposed the slogan is, 'London on the Ocean!' The enterprise of the citizens of London sixty years ago placed them in touch with all the ports on Lake Erie, and we trust that in the near future the ocean steamers will be at Port Stanley.

"I wish to state that we appreciate the fact that hydro-electric power had its birthplace in Berlin. We appreciate the energies of Mr. Detweiler, and we are proud that London is the home of Adam Beck. We trust that such men will come forward now and perfect this great movement, and I can assure you that the people of London will appreciate the work, even if it is not done by a citizen of London. I want you to feel that the City of London is behind you in this movement, and will do all they can to help forward this large project. I thank you one and all for your kind attention."

The next speaker was Mr. George Pattinson, M.P.P., of Preston. He said:— ...

"I think all present feel that the question of increased water transportation is one of the most important subjects before the country at the present time.

"I have heard Mr. Lyon discuss the question upon a former occasion, and am conversant with the views held by Mr. Detweiler. I have also heard advocates of the proposed Georgian Bay Canal, and must say, after considering all I have heard and read in connection with that project, its practicability seems very uncertain. But I feel that it is the imperative duty of the Government to proceed with as little delay as possible, with an enlarged Welland Canal; unless this is done the Americans, when the Erie Barge Canal is completed, will capture a great deal of the traffic we are carrying, and divert it to United States seaports.

If the people of Canada fifty years ago, with the limited resources at their command and the North West undreamed of, were able to build the Welland Canal, and at a later date to undertake and carry to a successful conclusion the Canadian Pacific Railway, surely with our increased resources, and the North West furnishing traffic to draw upon, we will rise to the situation and improve the St. Lawrence route, building a Welland Canal that will not only accommodate the present needs but provide for the increase in the size of vessels which is bound to come.

W. G. Weichel, M. P., Waterloo, said:

"Mr. Chairman and Gentlemen: This is certainly a project which requires the deepest consideration. As Mr. Pattinson has said, we have in the past accomplished great things in Canada, why should we not be able to accomplish this? I am glad to see so many here, and as Mr. Lyon stated, this is a meeting that should be photographed. I think Mr. Detweiler should have his photo sent to all the newspapers in Canada, to show the people the man who had the courage to come out in favor of a project of this kind. I told Mr. Detweiler that he was practically the father of the hydro-electric scheme in Berlin, and again in this good scheme he leads us, this great idea of completing the Welland Canal and making thus a deep waterway from the Great Lakes to the ocean, which is a greater thing than the hydro-electric, as it will benefit the whole of the Dominion. The other is provincial. This is a national question. And I hope the people of the Dominion of Canada will look upon this scheme as being the right thing, that they will take it up and accomplish this great benefit for the country. It is absolutely necessary, and we ought to be able to do this for our country.

I have not heard the other side of the question, but I actually believe, I must tell you, that from what I have heard in connection with this proposition, taking everything into consideration, that the Georgian Bay Canal is impracticable, and I believe the St. Lawrence and Welland route is the only feasible route for the people of Canada.

If it should come up in the House of Commons, I will use my best endeavor to further this very important matter. I feel that this is very necessary. Our country is growing by leaps and bounds, and I feel that the people of Canada must absolutely take this matter in hand and put it through."

Mr. George C. H. Lang, of Berlin

Mr. Chairman and Gentlemen: "What little I can help in this matter, I can assure you I shall be pleased to do. As a citizen of Berlin I feel highly honored to know that this large project emanated from here, and I would like to tell those gentlemen from the outside that when Dan. Detweiler undertakes a proposition of this kind, he has thoroughly studied the question. You may all recognize from reading his pamphlet, or from having heard it read to you to-day, that he has studied this question very thoroughly. We are proud and honored to have such an enterprising man in our midst. The successful outcome of the hydro-electric scheme is a guarantee of this great project also. Good water transportation is one of the most important questions in Canada. Anything we can do in that respect will certainly help our citizens and the whole country. I am delighted to know that such a large response has been made to the call sent out for this meeting, and it is my impression that it will have great weight with the government to have this large and important question so thoroughly put before the public. When the press takes this matter up I think you will find this a live issue before the country in a very short time."

Mr. W. B. Burgoyne, President of the Board of Trade, St. Catharines, said:

"I must certainly congratulate Mr. Detweiler and his associates upon the success of this meeting. It must be a great pleasure to Mr. Detweiler and his associates to see the good response that has been made, to see so many representatives here to-day, and no doubt had the weather been more pleasant there would have been a great many more present. I expected Mr. Thomas Conlon, one of the veteran navigators of the Great Lakes, here to-day. He was appointed a delegate by our Board of Trade, but, as Mayor Schmalz has read out to you, he stated that the demoralized condition of the railway prevented him from attending, and no doubt there are many others who would have been with us to-day if it had not been for the inclemency of the weather.

"The question we have taken up to-day will make history in the Dominion of Canada. It means for the Dominion all that hydro-electric power has meant for the Province of Ontario. I think Mr. Detweiler and his associates with him should be knighted for the courage of their conviction in this great undertaking. I think that we should go into this on the broadest lines, because it is not merely a question of to-day, it is

for the generations that are to come. We are prone to undertake things too small and on narrow lines. We want a large faith in Canada. Coming as I do from St. Catharines on the canal, I might be looked upon as having a self-interest in this matter, and I am glad to say that we have not been the originators of this great movement, but that it has come from the inland town of Berlin. I think the right line has been taken with regard to the Georgian Bay Canal scheme. It will never be a practicable undertaking, and whatever is spent on it will be so much money wasted. I don't suppose that we will be called upon to finance the Georgian Bay Canal, but what we are interested in is this question, the enlarging of our present navigation system so that we can compete with the improved Erie Barge Canal and the Panama Canal, which will be finished in a short time. I think no mistake will be made in bringing ocean vessels in touch with the Great Lakes."

Mayor Lemon of Owen Sound spoke as follows:

"Mr. Chairman and Gentlemen: My position in Owen Sound is very much different from your position down here, but I must say that we are just with you in the objection to the Georgian Bay Canal. We think that the Georgian Bay Canal is not a feasible undertaking. It is completely out of the question for boats in this age, four or five hundred feet long, to navigate a canal with so many curves. It is quite impossible. It will not cheapen transportation. I have here a resolution which was passed by the Owen Sound Board of Trade at a meeting held on the 9th of January. We are a little proud of our City, and think there is no place like Owen Sound. I suppose we all think that way.

(Mayor Lemon then read the resolution of the Owen Sound Board of Trade, as follows:)

"That the Council of the Board of Trade of the Town of Owen Sound is of the unanimous opinion that the Government should not undertake the building of the proposed ship canal from the Georgian Bay to the St. Lawrence as the facilities when completed will not cheapen transportation, and a small portion of the cost of this proposed canal, if spent in improving facilities at Georgian Bay ports and encouraging lower rail rates to seaboard, would give the required improvement in transportation between East and West in a much shorter time and at only a small fraction of the cost. Also that the extension of the Intercolonial Railway to Owen Sound would help to greatly improve the traffic facilities."

(Signed) J. K. McLaughlin,
Secretary of the Board of Trade."

Mayor Scott of Galt spoke as follows:

"It is a peculiar feature that this great movement, like the hydro-electric, started from the inland town of Berlin. If this were brought up in places like Toronto, St. Catharines, or any of the other lake ports, the argument would immediately be advanced that it was self-interest which they had in view. Coming, however, from the inland town of Berlin, it seems to me it is peculiarly disinterested. From the information that we have been able to gather as to the promoting of the Georgian Bay Canal, and as to the deepening of the Welland Canal, we feel strong-

ly that the Welland Canal is the proper scheme. I have no doubt it will become a great national question as time goes on. Coming from Galt, which is, like Berlin, an inland town, we cannot be thought selfish, which might be charged against larger places along the Lakes, but I am satisfied that the people of Galt will join with you in whatever steps will be taken to bring this to a successful issue."

Alexander Stewart, President of the Board of Trade, Guelph, spoke in part as follows:

"I think the time has come for us to take some definite steps in regard to carrying out and propagating the great project which we came here to-day to discuss, and which has been so ably discussed. Berlin is to be congratulated for being instrumental in bringing this question before the people of Canada, and also upon having a man like Mr. Detweiler. He is a man of large vision, as we have seen. He is capable of seeing large things. If Mr. Detweiler is a type of the citizens of Berlin, as I think he is, then it is easy to understand why Berlin is one of the most prosperous and rapidly growing cities in Canada.

"Of the two schemes for water transportation, I think the one which should be launched the earliest, and which certainly needs to be launched at once, is the deepening and completing of the Welland Canal. Reference has been made to the Erie Canal which is to be completed in three or four years, and soon we shall have the Panama Canal. To compete with this it seems that we should lose no time. I feel that we should right now take practical steps to organize a great national waterways union of Canada to proceed with the work we have undertaken. I move as follows:

"That this meeting now resolve itself into the Great Waterways Union of Canada. That the Mayors and Presidents of the Boards of Trade of the towns and cities of Canada be constituted a general committee and be invited to signify their acceptance. And that an executive committee of nine members be now appointed, with power to add to their number. And, further, to meet the immediate expenses involved in the inauguration of the Union, that each Board of Trade in Canada be requested to contribute an assessment of ten cents per member to be remitted to the Treasurer of the Union who shall be appointed at this meeting."

Seconded by Mayor Graham of London and carried.

Ald. Mills of Berlin spoke as follows:

"It affords me much pleasure that you have all joined in carrying the aforesaid resolution, and that it has been unanimous. I propose the following names for an Executive Committee, namely:—D. B. Detweiler and George C. H. Lang, of Berlin; J. W. Lyon and Alexander Stewart, of Guelph; Mayor Scott and Mr. Dobbie of Galt; Mr. George Pattinson, M. P. of Preston; Mr. Alois Bauer of Waterloo; and Mayor Graham of London; with power to add to their number."

"I had the pleasure of being the President of the Board of Trade in Berlin in 1904 and 1905. It was about that time that Mr. Detweiler got his vision of Niagara power, and I must confess that a good number of

the members of the Board had none too good faith in Daniel's vision. He appeared before the Board of Trade and we listened, and some of us, I am afraid, didn't pay a great deal of attention. The idea was commended, but was declared impossible of realization, and after different members of the Board had declined to go on the committee Mr. Detweiler was jocularly named "a committee of one," and the world knows now what has been accomplished. This great waterway will be of great benefit to the whole of the Dominion. Berlin is very proud to have this meeting held here."

The Executive as proposed was thereupon appointed, and at a meeting of the Executive which followed Mr. D. B. Detweiler, of Berlin, was made Chairman, George Pattinson, Esq., M. P. P., of Preston, was made Secretary, and Mayor Scott of Galt, was made Treasurer.

Inland Waterways of Canada

Ocean Navigation Via St. Lawrence and Welland Route

GEORGIAN BAY CANAL ROUTE IMPRACTICABLE.

(Pamphlet read by D. B. Detweiler at Waterways
Union Meeting at Berlin, on Jan. 11th, 1912.)

The simultaneous construction of the Georgian Bay Canal and enlargement of the Welland Canal, which logically includes similar navigation facilities in the St. Lawrence from Lake Ontario to Montreal, is at present urged upon the Government of Canada.

The estimated cost of the Georgian Bay Canal is \$100,000,000, an amount which experts say must be doubled or trebled. If the project proves in the end to be impracticable or fails to meet the necessities of the country, the expenditure of this amount, or even a respectable fraction of it, would be a criminal waste. The contingency of failure in so great an enterprise, where the government, before undertaking the project, can command the advice of skilled and unprejudiced engineers, ought to be impossible. But in the history of Canadian transportation facilities we have as mementoes of expensive and impossible enterprises, the Chignecto Ship Railway, the Trent Valley Canal, and more recently the Newmarket Ditch,—all of them projects boasted upon the public by politicians and contractors for their own advantage and not for the public benefit. In a young and growing country a few mistakes of this sort involving the loss of a few millions, while not to be desired, may be borne with; but even the resources of Canada, which in enthusiastic moments we call limitless, cannot be sunk with impunity in two or three hundred million dollar Trent Valley Canals and Newmarket Ditches.

OLD ONTARIO AND THE TWO PROJECTS.

If the Georgian Bay Canal be in point of fact a practical and not impossible undertaking, the question still remains whether the route offers sufficient advantage to justify the expenditure. If, for instance, in time of transit or safety of shipping, no decided advantage can be demonstrated in favor of the Georgian Bay Canal as opposed to the Great Lakes St. Lawrence-Welland route to Montreal, then to proceed with both projects would clearly be unjustifiable. Still less would it be proper to proceed with the Georgian Bay project to the exclusion of the competing route; for

by this course, without advantage to navigation and therefore without benefit to the country at large, Old Ontario would be put practically on a back alley; and toward the expenditure involved in producing this undesirable result, Old Ontario herself, as the principal revenue producing area of Canada, by a double injustice, would be compelled to contribute most.

In the present letter, the writer proposes to discuss the comparative advantages, feasibility and economy of the respective projects. He wishes especially to bring to public attention, in connection with this important matter, the view of experts which have either been publicly expressed or have otherwise come to his knowledge.

THE COMPARATIVE ADVANTAGES OF THE GEORGIAN BAY ROUTE ARE CONCEDED BY ITS OWN PROMOTERS TO BE INSIGNIFICANT.

By its supporters themselves, the only advantage claimed for the Georgian Bay route is the gain of a day or a day and a half in time of transit; and this advantage, they admit, would disappear as against an all lake and St. Lawrence-Welland route if the canals in the latter were deepened. This admission is contained in the following extract from the report on the proposed Georgian Bay Canal scheme as submitted to the Government of Canada in 1908, page 320:

"Time in transit is affected by the length of restricted canals on the route where speed has to be reduced, and by the number of lockages, and consequent delays. A close computation of the speed allowable in the different stretches, with about three-quarters of an hour delay for passage at each lock, gives about seventy hours as time of transit from Georgian Bay to Montreal.

"With the advantage of shorter distance between terminal harbors, it is computed that the route will be from one to one and a half days faster than any other existing water route, under present conditions, from the head of the Great Lakes to an open ocean port, apart from also having an enormous superiority as to carrying capacity. But as compared with a possible improved system of St. Lawrence canals to a depth of twenty-two feet, assuming that the number of locks would be greatly reduced, and some of the channels widened, probably no practical benefit in time of transit could be claimed, the saving in distance being nearly offset by the larger stretches of lake and wide river navigation which exist through Lake Erie and Lake Ontario route, where higher speeds would be permissible."

So far then, as the time of transit is concerned, an improved Lake and St. Lawrence-Welland waterway, even with its canals deepened only to twenty-two feet, would afford an equality, if not a superiority, of advantage as against the Georgian Bay and Ottawa River Route. If the canals upon the St. Lawrence-Welland route be deepened sufficiently to permit the passage of Ocean Vessels, there would result a great further reduction in time which would make the superiority of this route over that of the Georgian Bay still more pronounced.

OPINION OF HENRY HOLGATE, C. E., OF MONTREAL.

At a meeting of the Canadian Society of Civil Engineers held in Montreal, March 16th, last, Mr. Holgate, an expert Engineer of International

repute, who was chairman of the last Quebec Bridge Commission, read a paper entitled, "The Upper St. Lawrence River: Its International History, Development of Navigation, and Future Possibilities." In this interesting and able paper, which was printed in full and editorially endorsed in the April number of the "Journal of the Canadian Bankers' Association," Mr. Holgate declared that there has been as yet, no satisfactory answer to the question whether the enlargement of the St. Lawrence Canal system, with a system of dams and locks and an improved river channel, would not prove the most economic working out of the transportation problem so that vessels from the Upper Lakes might bring their cargoes direct to Montreal for transfer to ocean steamers. No comprehensive surveys had been made which might prove a guide in deciding the matter. "It is not common sense," he concluded, "to think about this, and to provide for the future as broadly as we can? What I would urge is that a careful study of this whole subject be made now so that a definite policy may be adopted in order to get the greatest efficiency out of what nature has given us. The study devolves primarily upon the Government of Canada, and I would that such a study of the river's possibilities should be submitted before any commitments be made by Canada, for the damming of the St. Lawrence at any point on it, or the carrying out of any other schemes of transportation. Let us first decide by logical deductions from definite data what scheme is better than the other, and then carry out the scheme in the most efficient way possible."

THE RECOMMENDATION OF THE SOCIETY OF CIVIL ENGINEERS.
OPINION OF JOHN KENNEDY, C. E. HE STATES THAT A
PROMINENT CONTRACTOR IS MANUFACTURING
OPINION ON THE PROPOSED CANAL.

Mr. Kennedy is the veteran consulting engineer of the Montreal Harbor Commission and an acknowledged authority on the navigation problems of the St. Lawrence and connecting waterways. He shared in the discussion of Mr. Holgate's paper by the above society, and the action of this body, which is the national organization of the engineering profession of Canada, is given in the following extract from the report of the meeting, by the Montreal Star of March 17th, last:—

"Lively discussion of the Georgian Bay versus the Welland Canal schemes was aroused at the Canadian Society of Civil Engineers' meeting last night after Henry Holgate had read a paper calling for a careful study of transportation problems before committing the country to any one project. The feature of the evening was furnished when John Kennedy, the veteran consulting engineer of the Harbor Commission, declared that a prominent contractor had been manufacturing public opinion for the last two years in regard to the Georgian Bay Canal, and that immense private interests were pushing the scheme. The Government, he said, was being forced to let the country in for the scheme, and everything else was kept in the background.

"As a result a resolution was passed, providing that the society would urge the Government to study carefully the various schemes affecting the St. Lawrence and that a comprehensive report be issued on the subject before committing the country either to any scheme for

damming the river or for canal transportation. The resolution was moved by Professor Herdt of McGill, and seconded by Mr. Kennedy."

THE GEORGIAN BAY CANAL A "SERPENTINE" WHICH NO LARGE VESSELS WOULD USE.

The Government report upon the proposed canal shows that the number of curves necessary in its course is one hundred and sixteen. Of this number seventy seven are curves of one mile radius, and thirty-nine are curves of a half mile radius. Isham Randolph, C. E., of Chicago, a Member of the Panama Canal Commission, states, that, by request of the vessel interests, all curves are avoided in the construction of the Panama Canal, the turns being made at sharper angles, with straight runs, as being much less dangerous. Every curve of a half mile radius is, in fact, a standing menace to navigation. The present water route from Montreal to the Upper Lakes has only one curve of this radius, viz.:—At Neebish point in the Soo River, the curve at this point being constructed with a bottom width of three hundred feet, which is being gradually widened to six hundred feet. A prominent transportation expert, speaking with reference to the Georgian Bay Canal and the number of its perilous curves, has declared that no sane captain would risk taking a large vessel through that "Serpentine."

Navigation experts scout the idea that insurance could ever be obtained on large vessels, short of prohibitive rates.

SHORTAGE OF WATER SUPPLY FOR NAVIGATION AT HEIGHT OF LAND.

Concerning the problem of navigation over the height of land, the Government report contains the following:—

"It must be stated, however, that the early surveys of 1855 and 1857, by Messrs. Shanly and Clarke, the conditions were very different from those of to-day, in regard to Lake Nipissing. Mr. Shanly, in his report, dismissed the Trout Lake summit by simply stating that the water supply is inadequate, and proposed to raise Lake Nipissing about sixteen feet, and lower Trout Lake to reach this level, thus including Lake Nipissing in the summit reach. This was probably the proper solution at the time, on account of the land around the lake being practically unoccupied. The shores of Lake Nipissing are so low that the raise of level proposed would naturally flood large tracts of land. At present such a scheme is inadmissible. The number of settlements, villages and towns, apart from the railway interests, which would be affected, are vital objections to it."

In order to provide water for locking across the summit, which Mr. Shanly stated was not available, surveys of the watershed area that could be made tributary to the summit were made, and the Government report recommends a system of dams by which the entire precipitation during the year could be saved for locking purposes. This, it is estimated, would provide a supply sufficient to lock through ten million tons per annum. Another watershed area was explored, and the report adds that it could be connected with the first one by a system of dams, canals, or tunnels, thus doubling the amount of water or provide a supply to lock through twenty million tons per year.

Against this maximum of possible supply, must be set the fact that in 1907 over fifty-eight million tons passed through the Soo locks; and further, that the tonnage alone, which passed through Canadian Canals grew from 5,665,259 tons in 1901, to 9,371,744 tons in 1905, and to 42,990,808 tons in 1910. With regard, therefore, to the present need, as well as to the phenomenal increase of traffic which is taking place at this time, a maximum capacity of twenty million tons is totally inadequate.

REMARKABLE EXPEDIENTS SUGGESTED FOR OVERCOMING THE WATER SHORTAGE.

The Government report suggests that a cut might be made to the Lake Nipissing level at a cost of nearly nine million dollars, but states that this would make perilous navigation. This admitted fact, it should be noticed, would preclude moreover the possibility of any considerable subsequent enlargement of the proposed canal. As a means to economizing the deficient water supply for the plan which is actually proposed to follow the report makes the following interesting and remarkable suggestion concerning power for locking operations at North Bay:—

"The power is developed here by gas producer plant in order to conserve water out of the summit reach that might otherwise be used in power development."

In this suggestion, the limit of resourcefulness, however, is not reached, for the report recommends further that water be pumped from Lake Nipissing into the summit reach for locking purposes, in order to supply the deficiency. At the same time, the report admits that "it is true that in no large canal has such a principle been resorted to for supplementing a deficiency in the water supply." Likewise, as to the storage of water in dams for locking purposes, the report admits, "that in no other country has this been done so extensively as is proposed here."

In point of fact, besides the dams required for storage of water, a system of forty-five other dams is required for regulation and other purposes. Theoretically indeed dams are designed as permanent structures, but in actual experience they are liable to break and run out. Such a break occurred only last summer in a dam on a tributary to the Upper Ottawa, and in a case of a similar accident in any of the dams for the proposed canal, the entire system of dams, and consequently the canal itself, would be out of commission during the period of repair, lasting several weeks or months, possibly in the height of the navigation season.

COMPARATIVE LENGTH OF NAVIGATION SEASON.

The temperature of North Bay in the spring and fall is necessarily lower than at the Welland Canal, and the ice on the north side of the high cliffs along the Georgian Bay route is exceptionally thick. These circumstances, in addition to the absence of currents in the deep water of the summit and adjoining stretches and especially the want of water to break up and flush out the heavy ice in the spring, create a combination of conditions, as a result of which prominent transportation men predict for the Georgian Bay Canal a navigation season shorter by a month or more than that of the Welland.

THE FAVORITE ARGUMENT ON THE GEORGIAN BAY CANAL IS ILLUSIVE.

In support of this canal project the argument is frequently offered, that in case of hostilities with the United States, such a canal would be wholly in Canadian territory, and therefore available for our Western traffic, when the all-lake route would be too much exposed, if not blockaded. The contingency of war with the United States is too remote to deserve much consideration; and in other respects moreover, the argument is not valid.

The treaties between Great Britain and the United States provide that the navigation of all navigable boundary waters shall forever continue free and open for the purpose of commerce to both countries equally. These rights also extend to Lake Michigan and to all canals connecting boundary waters and now existing, or which may hereafter be constructed on either side of the line. Under this arrangement the U. S. depends on the use of some waterways wholly in Canadian territory, while Canada in turn depends on the American channel in the Sault Ste. Marie River for all the larger-sized vessels. In any event, in case of hostilities, passage to Canadian craft would be barred at Sault Ste. Marie. The proposed Georgian Bay Canal could consequently be used at such time only for traffic originating in the Georgian Bay and vicinity, which in itself is a mere bagatelle for the railroads operating out of Owen Sound, Collingwood, Midland, Port McNichol, Parry Sound, Key Harbor and other ports on that bay. Navigation in any event would be limited to about six months in the year by that route.

ST. LAWRENCE-WELLAND DEEP WATERWAY FOR OCEAN VESSELS THE PROPER SOLUTION.

It has been observed by a prominent engineer that the history of the development of our public works shows that the whole works begun by one generation serve the purpose only of the generation that began them.

If we admit the correctness of this statement, may we not question, at the same time, the wisdom of continuing this policy? In point of fact, it was not by such a policy that the Canadian Pacific Railway was projected for the welding of the scattered provinces of Canada. The road, when projected, was far in advance of the needs of the generation which projected it. It was a great national undertaking, built with an eye to future needs, development and conditions, and the result has amply justified the construction of this highway of commerce, which, as some predicted, could never be more than a streak of rust.

Neither is the above policy followed in the projection of the Grand Trunk Pacific; otherwise there would not be expended upon its construction the many additional millions necessary in order to make it the best trans-continental line in America.

At present there are before the country two twenty-two foot canal propositions. Either of these propositions, or indeed both of them, if carried into effect, would be quite inadequate for the needs of Canada in an almost immediate future. It requires no stretch of imagination to foresee the day when the Canadian Northwest will produce as many tons of grain as it now produces bushels. In view of this pending and inevitable de-

velopment, why should Canada indulge in expensive makeshifts? Why not solve at once, and for all time, the entire problem of water transportation by constructing a deep waterway from the ocean to the head of the Great Lakes.—the centre of America's greatest present and potential energies?

Such a development would necessarily also provide for a uniform regulation of the lake levels, which is so urgently needed.

OPINION OF GENERAL BIXBY, CHIEF OF THE U. S. ARMY ENGINEERS.

The question of deep inland water navigation has been raised in the form of inquiries within the past year, both in Canada and the United States; the matter, however, has received greater consideration in the United States than in the Dominion. In an interview at Washington, D. C., in March last, General W. H. Bixby, Chief of the U. S. Army Engineers, in whose department the matter falls, declared that the opening of the Great Lakes to the sea for ocean craft is merely a matter of money; there is no obstacle in the way that cannot be overcome. He also called attention to the fact that the investment involved in the construction of large vessels is so great that they cannot afford to pass slowly through long, narrow and confined channels, with their attendant dangers, and stated that the suggested improvements in the St. Lawrence would consist of six or eight dams creating small lakes through which would pass the largest vessels at practically full speed. By the suggested improvements, the number of locks would, however, be reduced from twenty-one to eight or six, thereby effecting a great saving in time of transit. The corresponding proposed improvement in the Welland Canal would reduce the number of locks there from twenty-five to three or four, making this route incomparably the quickest and the safest to the sea, and providing amply for future commercial development. Mr. John Kennedy, C. E., an acknowledged authority on the subject states "The problem in its present stage as I take it is not an engineering one but of trade and transportation route. Nobody doubts that the waterway is feasible as an engineering problem."

EXERTIONS OF THE HON. CHARLES E. TOWNSEND, MEMBER OF U. S. SENATE FOR MICHIGAN.

On June 27th, last, the Hon. Mr. Townsend, member for Michigan, and Chairman of the Senate Committee on Coast and Insular survey, moved the following resolution in the Senate of the United States:

"That for the purpose of improving the St. Lawrence River from the Great Lakes, the President of the United States is authorized and directed to enter into an agreement with the Dominion of Canada which shall provide, upon such terms as may be agreed upon, for a waterway of sufficient depth and width to accommodate deep water or sea-going vessels, for the common use of both countries."

Both Mr. Townsend and General Bixby urged an investigation and General Bixby has suggested that the United States should contribute towards the cost of the proposed developments in Canada, expecting in re-

turn only the opportunity to reach the ocean by means of the resulting deep water channel for the largest ships.

**A GREATER PROPOSITION THAN THE PANAMA CANAL.
ADVANTAGE OF THE DEEP WATERWAY IN REDUCTION
OF FREIGHT RATES.**

The Hon. Mr. Townsend, in speaking to his resolution in the Senate, declared that to him such a waterway was a greater proposition than the Panama Canal. If the project were realized, the Interstate Commerce Commission would no longer have occasion to pass upon railroad rates from the middle West to the Atlantic; water competition would keep them reasonable.

In speaking of this feature, he cited further the peculiar conditions under which the merchants of Utah and Arizona, when shipping freight across the continent to the Atlantic or receiving freight in return, find it profitable to forward such shipments first to the Pacific in order to secure the competing water-rate via Cape Horn.

Once the Panama Canal is open, the length of the present water route via Cape Horn will be cut more than two-thirds. If the present water rate over the immense distance around Cape Horn is already such a factor in competing freight rates, what will be the consequence of the still keener competition via the Panama Canal?

**MR. C. M. HAYS UPON WATER CARRIAGE FROM CANADIAN
WEST VIA PANAMA.**

When in England last summer, Mr. C. M. Hays, President of the Grand Trunk and Grand Trunk Pacific Railways, predicted that within five years half the products of the Canadian Northwest would find an outlet via the Pacific Ocean; the change would be brought about by the Panama Canal.

If the view of this transportation expert be correct, a necessary corollary will be that the vessels freighting these products from the Pacific ports of Canada will carry return cargoes thither from Europe at rates that will make serious inroads upon our eastern and inter-provincial trade. The only effective answer to this competition on the Pacific is by water-way which will give to ocean vessels access to the upper lakes. By such a water-way not merely would Canada benefit by the reduction in rates upon shipments to and from Europe; interprovincial trade would be vastly promoted. Nova Scotia coal, for instance, which now can be shipped profitably only as far west as Montreal, would find a market in Ontario. A natural consequence would be a water-way from Lake Superior to Manitoba and the Western Provinces via Lake Winnipeg and the Saskatchewan River, whereby Canadian trade would be retained in Canadian channels. The saving in freight rates for the products of the Canadian farmer in the West, via Lake Superior ports, would be three or four cents a bushel on wheat, and on many other classes of freight the saving would be much larger.

The benefits to intervening lake ports may be illustrated by the case of the city of Galveston in Texas. By deepening the channel at the entrance to her harbor, access was given at this port to ocean borne commerce. The total cost of this and other harbor improvements at Galveston

was some \$10,000,000. The result, according to a report of a board of U. S. Engineers, of December 19th, 1908, has been an annual saving of \$10,000,000 to commerce. The business of the port was increased enormously, and Capt. John C. Oakes, Corps of Engineers of U. S. Army, in his report of December 30th, 1908, declares, "I have no doubt, if a careful study be made of this question, a saving of \$20,000,000 per annum could certainly be shown, if not \$30,000,000

THE COST OF THE ST. LAWRENCE IMPROVEMENT COULD BE PAID BY THE SALE OF WATER POWER ALONE.

General Bixby states that the navigation improvements proposed to be placed in the St. Lawrence between Ogdensburg and Montreal would develop four to five million of water horsepower, the greater part of which would be in Canada. The Government report on the Georgian Bay Canal estimates the value of the partially developed powers on that route at five dollars per horse-power per annum. In many cases these powers on the Georgian Bay route are at places out of the way and inconvenient for manufacturers. For convenience and availability the position of the partially developed powers upon the St. Lawrence route could not be excelled. A most reasonable price would, therefore, be five dollars per h. p. per annum. On the assumption that only three million horsepower were sold at that figure, the annual revenue produced would be \$15,000,000, an amount equivalent to five per cent. upon a capital expenditure of \$300,000,000. If the proposed improvements should cost \$300,000,000 the Government of Canada which obtains loans at three per cent., would out of the power revenue in addition to paying interest of \$9,000,000.00, on the expenditure provide a sinking fund of \$6,000,000.00 per annum. The Hon. Mr. Townsend, in speaking to his resolution in the U. S. Senate, estimated the cost at about \$150,000,000.

Concerning the possibility of disposing of water-power at convenient locations along the St. Lawrence, there is no doubt. So great is the demand for it, that one Company at the Long Sault Rapids has offered to place dams and locks for deep water navigation at this point, in return for the privilege of developing power; and for the use of the power thus produced this company, besides incurring all the expense of construction, has offered to pay to the Government an annual rental per h. p. per annum.

In a discussion that took place at the Nomad's Club in Montreal, recently, Mr. John Kennedy, C. E., is quoted as follows:—"There were companies to-day," he said, "who could take the St. Lawrence River with its waterpower, and give us a free Canal to Prescott," i. e., from the Gulf of St. Lawrence into Lake Ontario.

The power used in the Electro-Chemical and Electro-Metallurgical industries is increasing in all countries at an especially rapid rate; and in Sweden one German firm, the Badische Company of Ludwigshafen am Rhein, uses 500,000 h. p. in the manufacture of nitrogenous fertilizers alone. A similar industry is operated at Niagara Falls, Ontario. Such a power development along the St. Lawrence would make Montreal and Eastern Ontario the centre of the Electric manufacturing industries of the world.

LARGER BENEFITS OF AN OCEAN VESSEL WATERWAY.

The Atlantic would be extended to Port Arthur and transportation for sea-going craft would be brought within easy reach of the ultimate centres of Canadian population. In this connection the Hon. Mr. Townsend observed that "transportation of sea-going craft would be brought within one hour of the centre of population." At our lake ports would be seen vessels flying the flags of all the maritime nations. The proposition is the largest and most far-reaching in its consequences that has been before the Canadian Public since the inception of the Canadian Pacific Railway. It should be placed alongside that greatest engineering work,—the Panama Canal,—as an early 20th Century achievement. The undertaking of this development along the international boundary, by the Canadian and United States Governments, would be as impressive as any memorial in connection with the very proper celebration of the 100 years of Peace between those countries, and it would be a potent factor in the continuation of the same. Co-operation in matters of such transcendent interest and importance could but make for comity between the two countries.

THE NEED FOR IMMEDIATE ACTION.

Application has been made to the Government by private companies for permission to construct permanent works in the St. Lawrence to divert the water for power purposes. One such application is still pending. It has been strongly opposed by Messrs. Holgate and Kennedy, acting as expert advisers to Francis King, K.C., of Kingston, and Eugene Lafleur, K. C., of Montreal, counsel for the opposition to the application. This opposition was offered by these gentlemen purely in the public interest. Action upon the application was deferred. Were the application ultimately successful, the development of an ocean waterways would be definitely and forever barred. Certain transportation interests desire nothing so much as this very result. Were the St. Lawrence definitely barred to large vessels, an American waterway for ocean traffic from New York to the Great Lakes would presently be developed, to the detriment of Canadian commerce.

The immediate need is for energetic public action on behalf of our national transportation interests and their proper development. With respect to the rival routes Montreal is situated neutrally; yet leading engineers of that city, out of public spirit, appeal for an investigation of the possibilities of the St. Lawrence-Welland route, and for the postponement meanwhile of any competing projects. In Toronto and Old Ontario, as districts to which the choice of routes is a matter of great moment, the call for action is much greater: and the apathy hitherto prevailing in these parts has been a subject of remark in Montreal. Agitation of the question can be securely founded on the resolution of the Canadian Society of Civil Engineers, the national organization of that profession. This would embrace the enlargement of the Welland Canal already requested, and need not delay any contemplated action on that request. \$750,000.00 have been expended upon surveys of the Georgian Bay route. An investigation of the question of an ocean waterway could be made for a respectable fraction of that amount. The securing of favorable action by the Government is purely a matter of organization. In such a cause nothing should be left

to chance. It is, however, neither good business nor policy timidly to ask the Government to consider the deepening of the present route to a 22 foot channel, or to ask for a deepening of the Welland Canal without including the St. Lawrence Canals as a complete route. A twenty-two foot channel will attract only the local support of the communities situated directly on its route. An ocean waterway, the greater project, will appeal to every class and section. Ocean navigation through the lakes is, moreover, a new proposition; and as such, it will afford the Government a ground, if such be needed, for shelving the competing project which, by the Government report of 1908, has been shown to be impracticable.

THE REQUISITE DEPTH OF THE PROPOSED CANALS.

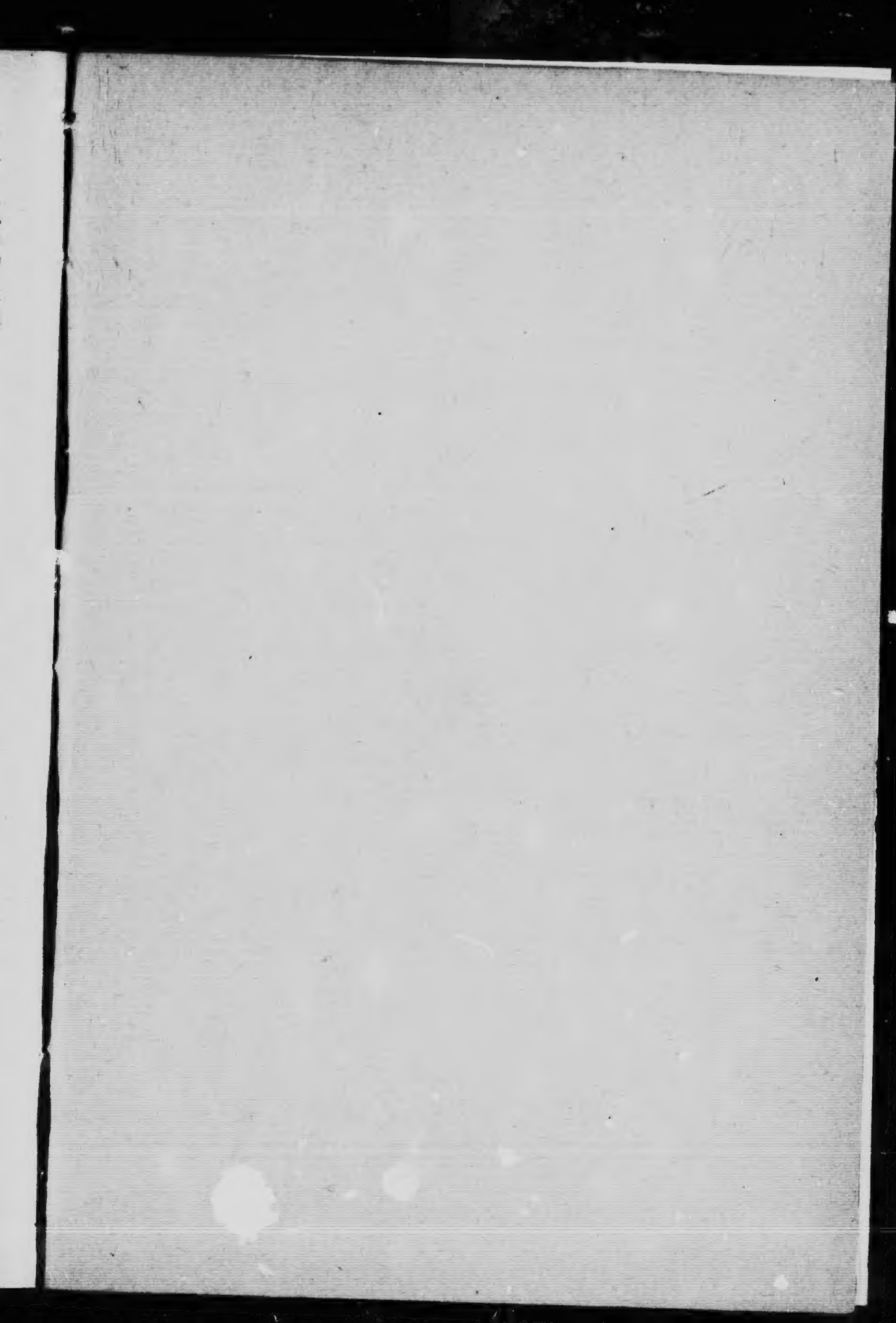
Regarding direct Ocean Navigation to the Great Lakes, Mr. J. E. Furness, the managing director of the large Furness-Withy steamship line, visited Port Arthur, Ontario, last June, and stated at the time that his company was considering the question of plying direct from Liverpool to Port Arthur in the coming year. This statement made when our lake and canal system allows a draft of only 14 ft., while the entire St. Lawrence from Montreal to the Sea will soon have a channel completed to a depth of 35 ft., shows how comprehensive are the terms "Ocean Ports" and "Ocean Navigation." The rapidly increasing size of all classes of ocean craft necessitates a development of not less than 32 ft., and with the impracticable Georgian Bay scheme removed from consideration, the great contributing financial values of the water powers along the present route will enable the Government to undertake without hesitation a development of that depth.

THE PROPOSED MOVEMENT.

To secure action at Ottawa would not be difficult. Governments welcome an organized expression of opinion which will relieve them from an embarrassing situation. A movement well concerted and sustained would materially assist the national administration in solving the question of inland navigation purely with a view to the public interest. Even more than was the case with the Hydro-Electric scheme, the importance of the project will lift the supporting movement above politics, for the interests involved are manifold greater in extent and importance than those concerned in the power scheme. The present project, however, though vastly greater, is in itself much simpler than that scheme. In that case, opposing private companies were already in the field. They urged that the transmission of power at the proposed high voltage was technically impossible, and that the project was commercially impracticable. In the face of these objections and of the difficulties of co-operation, involving large financial obligations of numerous municipalities, a deputation of 1400 was organized and waited on the Ontario Government in the interests of the scheme, which, at that time, was only a sectional or at best a provincial matter. In support of a national proposition, such as a large Ocean Waterway, appealing to the entire country, it is clear, from the interest already shown and the assistance proffered, that a deputation many times as large and representing practically all sections, can be organized with comparative ease. The mere fact that such a deputation would be organized, if necessary, should com-

mand attention at Ottawa at once; and the Government will be relieved of the pressure manufactured by contractors and others in favor of the impracticable Georgian Bay route.

No greater question is likely to face Canada for several generations. To the men of the nation, east and west, is offered the opportunity of a lifetime. An appeal is made especially to the younger citizens. Those who contribute now to a solution, along broad lines, and in keeping with the important interests involved and the needs of our growing country, may expect in future days to look back with permanent and increasing satisfaction on a monumental public work constructed through their interest and exertions.



TELEGRAPH PRESSES

